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Simulation Journal #1
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Simulation 1 Journal

1. Analyze a variety of patient situations to plan safe, quality, evidence-based, patient-centered nursing care within the scope of practice of a Registered Nurse.

A. Plan patient-centered care for a variety of patients across the lifespan.

- Cervical cancer most often develops due to the recurrent infection of the cervix by high risk strains of human papillomavirus (HPV). The infection causes cellular changes in the squamous epithelial cells of the cervix, which is characterized by abnormal cell growth and alterations in the cell structure. Over time, if these abnormal cells accumulate and go unseen by the body's immune system, they may progress into precancerous lesions that begin to mutate creating cancerous tumors. If left untreated, these lesions can further progress to invasive cancer. Brachytherapy is a form of internal radiation therapy used to treat various cancers, including cervical cancer. In this treatment, a radioactive source is placed directly inside or very close to the tumor, allowing for a high dose of radiation to be delivered directly to the cancer cells while minimizing exposure to surrounding healthy tissue. The high dose of radiation in brachytherapy works by damaging the DNA of cancer cells, which impairs their ability to divide and grow, ultimately leading to their destruction. Now while brachytherapy implants can be left in place for days, weeks, even months, my patient is only intended to have hers in for 8 hours. For my patient specifically, the plan of care is to place the cervical implants, leave them for 8 hours to do their magic, remove the cervical implants, and send her on her way home. Upon discharge, we'd educate the patient on what signs and symptoms to look out for and monitor. As well as what to look out for that might require her to contact her doctor or come into the emergency room. Based on Erikson's theory of psychosocial development, our patient, a 60-year-old female, appears to be in the stage of middle adulthood, which is characterized by the psychosocial conflict of generativity versus stagnation. I believe Maria is currently in the generativity stage, as she demonstrates a strong desire to make a positive impact on those around her. Her commitment to her family is evident, particularly with the presence of her daughter at the bedside, suggesting strong familial bonds and support. Additionally, Maria's active involvement in her church further underscores her drive to give back to her community, fostering a sense of purpose and connection. These factors indicate that Maria is actively seeking to leave a lasting legacy and contribute to the well-being of others, which aligns with the generativity aspect of Erikson's theory.

B. Analyze nursing care for patients to determine if safe, quality, patient care was delivered.

- We ensured the delivery of safe, high-quality patient care through a series of careful actions throughout the entire simulation. Before entering the patient's room, we took the necessary precautions by donning the appropriate personal protective equipment (PPE) and closing the door behind us to minimize exposure. To further reduce the risk of radiation exposure, we made sure to group care tasks together, allowing us to complete necessary interventions efficiently and with minimal time spent in the room. One of our first steps was to quickly remove the pregnant daughter from the room. The reasoning of this action was due to the radiation exposure and how it poses a significant risk to both her and her unborn fetus. We also made adjustments to the room layout, moving the bed away from the wall and positioning it in the center of the room to ensure that radiation exposure was minimized for everyone involved. As part of our holistic approach,

we provided thorough education to the patient and her daughter about the brachytherapy procedure, addressing their concerns and ensuring they understood what to expect. During the simulation, we made sure to complete a physical assessment, which included taking the patient's vital signs to monitor her condition closely. We worked collaboratively with the healthcare providers, the radiology team, and one another to ensure that all aspects of the patient's care were beneficial and well executed. When it came time to remove the radioactive seeds from the bed, we made sure to follow established protocols and procedures to ensure the safety of both the patient and ourselves.

C. Examine evidence-based practices used by the Registered Nurse.

- Throughout the entire simulation, my fellow nurse and I were committed to following evidence-based practice (EBP) to ensure the efficient, safe, and high-quality care of our patient from start to finish. Upon entering the patient's room, we immediately gelled in, performing hand hygiene as part of our standard infection control measures. Following safety guidelines, we promptly removed the pregnant daughter from the room, adhering to the posted instructions on the door, which explicitly stated that no pregnant visitors were allowed due to radiation risks. To further enhance safety, we rearranged the patient's bed, moving it away from the wall and positioning it in the center of the room. This adjustment helps reduce the potential for radiation exposure to neighboring rooms, ensuring the safety of others. As we proceeded with direct patient care, we made sure to wear the appropriate personal protective equipment (PPE), including our dosimeters, to monitor radiation exposure. We also clustered our care tasks efficiently within a 30 minute time frame, limiting our time in the room and minimizing radiation exposure for ourselves. Patient education was another crucial aspect of our care. We took time to explain the brachytherapy procedure to both the patient and her daughter, ensuring they understood what to expect. We described brachytherapy as an alternative form of radiation therapy that delivers a higher, more direct dose of radiation in a shorter amount of time compared to traditional radiation. We also explained how this is particularly more beneficial in targeting cancerous cells more precisely while reducing exposure to surrounding healthy tissues. For her case specifically, we explained that radioactive pellets were placed near her cervix with the intention of leaving them in for 8 hours, allowing the radiation to target the tumors and effectively kill the cancer cells.

2. Apply clinical judgment when addressing a variety of patient situations.

A. Apply knowledge of Registered Nursing practice using clinical judgment and the nursing process.

- Throughout the simulation, we consistently applied clinical judgment while delivering patient care and providing patient education. We used Tanner's Model in each intervention we initiated. A clear example of this was when we immediately noticed the pregnant daughter sitting next to her radioactive mother. We interpreted this situation as an unnecessary risk of radiation exposure to both the daughter and her unborn fetus, which indicated a knowledge deficit. We responded by promptly removing the daughter from the room to ensure her safety. Upon reflection, we recognized that our timely action prevented the daughter from being exposed to a harmful and potentially dangerous environment. Another instance where we applied Tanner's model occurred when we first entered the room and noticed the patient's bed was positioned directly against the

wall. We interpreted this as a potential safety hazard, particularly for the neighboring patient on the other side of the wall, who could be exposed to radiation. Our response was to reposition the bed to the center of the room, which minimized radiation exposure to others. Reflecting on this decision, we found it to be a positive outcome, as it not only protected the neighboring patient from unnecessary radiation but also aligned with the hospital's radiation safety protocols. In both instances, Tanner's model guided our clinical reasoning, judgement, and actions ensuring we delivered safe and effective care to both the patient and others near her.

B. Incorporate risk factors and predict and manage potential complications to case studies that present a variety of patient situations across the life span.
    - Nursing diagnosis from this specific case include but are not limited to knowledge deficit, acute pain, impaired skin integrity, risk for falls, risk for injury related to brachytherapy, and risk for infection. One way we mitigated the knowledge deficit was by providing patient education on brachytherapy to the patient and the patient's daughter. They were unaware of the harm radiation can cause to an unborn fetus, so by providing patient education on how radiation exposure could cause harm and possibly even birth defects. We also provided education on brachytherapy, education on how it is an alternative form of radiation, one that provides a higher, more direct dosage of radiation for a shorter amount of time as opposed to traditional radiation. In order to mitigate her diagnosis of acute pain we were sure to ask the patient what her pain level was. We also asked what a tolerable level of pain was which she stated is 6/10. We educated her to push her call light if she felt such pain and needed pain medication. Patient was able to verbalize understanding and agreed to call if her pain got to that level. For impaired skin integrity, although we did a full body assessment, I would have been more thorough in assessing her peri area for redness or swelling. What we did to mitigate her risk for falls, was educate her on staying in the bed and not getting up on her own or at all to prevent any pellets from coming loose or falling out. We also educated her on the call light system in that simply pushing a button would signal us to come into the room and assess any questions or needs she may have without having to move out of bed. Her risk for injury related to brachytherapy is not only directed towards herself, but to anyone that may come into close contact with her. This could include family members, staff members, nurses, doctors, and anyone else entering the room. In order to avoid any risk of injury we made sure to utilize the ppe outside the door that included a lead apron, gloves, and a dosimeter on the outside of our apron. We also made sure to cluster our cares and work efficiently and quickly to keep our exposure time down to a minimum. We removed the pregnant daughter to avoid any more damage that could potentially be done to herself and her unborn fetus. And we made sure to assess our patient, her body, her peri area, and her pain level throughout all of our cares. Finally, to mitigate any risk for infection, we checked all of her lines that included making sure her foley catheter was placed correctly. Her foley catheter has no signs of redness or swelling, she had adequate urine output, and the color of the urine was yellow and clear all within normal limits. We did not have a chance to flush her IV, but in the real world we would have assessed the site and flushed it to ensure it was working properly in case fluids or medications needed to be given.

C. Prioritize patient care.

- Before entering the patient's room, we prepared by donning all necessary personal protective equipment in accordance with established protocols for radiation safety. This step was essential to protect both ourselves and the patient from unnecessary exposure to radiation. The proper use of PPE, such as lead aprons, gloves, and dosimeters, was emphasized, ensuring that no risks were taken. Additionally, the door to the patient's room was securely closed behind us, further minimizing the potential for radiation leakage or exposure to individuals not directly involved in the patient's care. Recognizing the importance of minimizing unnecessary exposure, we clustered patient care tasks together. This approach not only ensured that we could efficiently complete the required interventions, but also significantly reduced the amount of time spent in the patient's room, thereby limiting potential radiation exposure for all individuals involved. Every action taken within the room was intentional and designed with both patient and provider safety in mind. A critical part of our safety protocol involved the careful consideration of the patient's family dynamics. Given the risks associated with radiation exposure, we made the decision to promptly remove the pregnant daughter from the room. This action was not taken lightly, but it was done to eliminate any potential risks to the unborn child, as recommended by radiation safety guidelines. After ensuring her safety, we provided thorough, sensitive education to both the patient and her daughter regarding radiation, the potential risks involved, and what to expect during and after the procedure. This educational session allowed both the patient and her daughter to feel informed, empowered, and reassured about the treatment process. Collaboration was key in ensuring coordinated, efficient, and safe care throughout the procedure. We worked in close partnership with the multidisciplinary team, including the radiation oncologists, radiology technicians, and other nursing colleagues, to ensure seamless communication of each step in the treatment plan. Having a positive work environment and efficient collaboration within the patient care team is vital, as it fosters positivity and minimizes potential for errors and safety risks.

3. Evaluate quality measures for the purpose of improving patient care.

A. Examine patient outcomes to determine if quality measures were implemented.

- The first outcome goal we had created for her was that the patient will verbalize understanding of brachytherapy, procedure, and plan of care. Patient has shown proficiency in meeting this goal by verbalizing understanding. Maintain her pain level less than or equal to 6/10. Since she has not been discharged and still has a chance to not meet this goal, it is too early to tell. However, what we did to prepare for a positive outcome was we educated her on the call light system, and to call if she began to feel any pain that was getting close to her tolerable level. Patient will refrain from falling during hospitalization. Since the patient has not yet been discharged, saying that this patient has met this goal would be too soon. However, to prepare for a positive outcome we made sure she had her non-slip socks on, we made sure to educate her on the call light system, and we also made sure to educate the patient the importance of staying in bed to keep the pellets from falling out. Patient will refrain from infection during hospitalization. Again, since she has not yet been discharged, so saying she met this goal too soon would be premature. However, preparing for a positive outcome is something we can do, and indeed we did. Ways we did to mitigate that risk for infection is by monitoring for signs and symptoms of infection. That includes signs of redness, swelling, discolored output, are all things we could monitor to mitigate any risk of infection.

B. Examine nursing care to determine the effect of quality improvement processes used to prevent errors and protect patient safety.
    - One error that we saw during this simulation was initially when we walked in. Having the pregnant daughter at bedside is extremely dangerous, and should not have even occurred. In the real world, an incident report would have had to be filed. Not with the intention of getting anyone fired, but with the intention of keeping this from happening again within the hospital. During the simulation, some things we did to improve quality processes to mitigate errors was our documentation. We made sure to document everything as best as possible while providing patient care and while also communicating to the provider as well. Another way we prevented errors and exemplified quality patient care with patient safety in mind was before we had even entered the door. Prior to entering the room we made sure to go over the radiation precaution sign which stated that proper ppe and a dosimeter were both vital when providing direct patient care. Since the patient is receiving temporary brachytherapy, it's important to limit exposure to others by adhering to visitation guidelines. We made sure to do this by only allowing necessary staff into the room and by removing the pregnant daughter who should not have been allowed in. Those are just a couple of examples of how we mitigated error and provided quality patient safety while providing our direct patient care.

C. Review case studies to determine how National Patient Safety Goals apply to the situation.
    - During our simulation, we successfully met several national patient safety goals in ensuring the delivery of safe and effective care. One of the key goals we addressed was correctly identifying our patient, which we achieved by using two patient identifiers, ensuring accuracy and minimizing the risk of errors. We also prioritized improved staff communication, which was accomplished through clear, efficient communication and collaboration between our nursing team, the provider, and the radiologist. Additionally, we kept the patient and her daughter well informed, providing updates throughout the process, which further supported communication goals. Another critical safety goal we met was infection prevention. We made sure to stick to strict hygiene protocols by performing hand hygiene, exemplified by gelling in, and wearing gloves when assessing the patient. We also followed proper infection control practices by using the necessary ppe, including lead aprons, gloves, and dosimeters to monitor radiation exposure. These steps ensured we minimized the risk of infection and radiation exposure during the simulation. Even though we met these standards, there is one thing we recognize that we could have done better. Which was better assessing the foley catheter and the surrounding peri area for signs of infection, such as redness or swelling. While we didn't focus on this as much during the simulation, we are committed to remembering this critical aspect of care in future scenarios to ensure patient safety.

4. Determine the effect of teamwork and collaboration with members of the interprofessional team, the patient, and the patient's support persons.

A. Determine pertinent, accurate, and complete information to communicate to the interprofessional team to use for planning patient care.

- When communicating with the doctor, I utilized SBAR to organize the information clearly and efficiently. First, I introduced myself as the nurse caring for Maria Sanchez, a 60-year-old patient on floor X, room XX, and reported her current condition, noting that she was experiencing a pain level of 2/10. Next, I provided the Background. I explained that Maria was diagnosed with stage 3 cervical cancer approximately one month ago. I also mentioned that two hours ago, she underwent brachytherapy cervical implant placement, with the intention of leaving the implants in place for 8 hours. For the Assessment, I shared our findings that four of the twelve cervical implant pellets had dislodged. I reassured the doctor that we followed proper protocol by safely packaging the dislodged pellets in a lead container. Finally, under Recommendation, I asked what he would like us to do for her in regards to her dislodged cervical implants, and whether any additional actions were required for the patient.

B. Interpret the impact of team functioning on safety and quality improvement.
    - The impact of my team had on safety and quality improvement was indeed positive and beneficial to the patient. My team consisted of myself and a fellow nurse. We were able to communicate and collaborate efficiently and effectively to help our patient in this simulation. While I was doing vital signs, he was assessing. While I was calling the provider, he was providing patient education. While I was holding the lead container, he was using the tongs to properly dispose of the cervical implants. Once the third member of our team completed her role as family member, she jumped straight in as our assistant and scribe charting everything that needed to be documented. We truly worked as such a great team and I believe it showed in our performance. The benefits a good team can have on patient care is astronomical, and I believe my team did just that in our simulation.

C. Apply conflict resolution principles to patient care scenarios.
    - One challenge we encountered during the simulation occurred at the beginning, when we noticed the pregnant daughter sitting directly beside the patient. When we asked her to step out of the room, she was initially hesitant and reluctant to leave, as she was the primary caregiver for her mother. To calmly address the situation, we took several steps. First, we provided clear patient education, explaining the potential risks of radiation exposure to both her and her unborn fetus. While we did not mention it during the simulation, in real world practice, we would explain that prolonged radiation exposure could even lead to birth defects. We also reassured the daughter by offering emotional support, assuring her that we would keep her updated and informed with any relevant information throughout the process. After this, the daughter became more comfortable with the idea of leaving the room and agreed to step out. Through education and reassurance, we were able to resolve the conflict respectfully and ensure both the patient and her daughter’s safety.

5. Demonstrate the use of information technology to support and communicate the provision of patient care.

A. Use patient care technologies, information systems/technologies, and communication devices to document nursing care.
    - In this nursing simulation, we utilized several IT tools to meet this goal, particularly through the navigation of the Medication Administration record, assessing patient vitals, and thoroughly

documenting all aspects of care provided. In our simulation, we navigated through the MAR to ensure that all medications and treatments related to the patient's brachytherapy procedure were documented and administered as per the provider's orders. We also were able to utilize both the MAR and patient chart when it came time to contact the daughter with updates. During our simulation, we used patient care technologies to measure and record vital signs such as blood pressure, heart rate, respiratory rate, and temperature, which are all critical in determining how well the patient is tolerating the procedure. Once the vitals were assessed, we documented them directly into the patient's chart. The documentation of vital signs was automatically time-stamped, which helped maintain a precise record of the patient's status over time. This allowed for easy comparison and trend analysis, enabling the care team to make timely decisions about further interventions. By effectively navigating through the MAR, assessing patient vitals using modern technology, and documenting every aspect of care, we were able to provide high-quality, safe, and patient-centered care.

B. Enter computer documentation accurately and completely.

Time	Description
1255	Provided education for pregnant family member safety
1256	Physical assessment and vital signs
1256	Foley catheter in place
1257	Seeds dislodged (4/12)
1258	RN uses tongs to remove dislodged seeds and placed in lead container per protocol
1259	Pt refused pain medication at this time 1300
1300	RN contacted MD: call radiology to replace 4 seeds. Once replaced, restart the 8 hour timer.
1303	Radiology call: Opening at 1400 for replacement, wheel put down back elevators and bring the lead box with seeds.
1305	Called daughter to inform her of the situation and provided further education about visitor safety.

6. Incorporate leadership, management, legal, and ethical principles to guide practice as a Registered Nurse in a variety of healthcare settings.

A. Incorporate practice standards and guidelines for legal and ethical conduct to patient situations across the life span in a variety of healthcare settings.

- During this simulation, we ensured that our patient care aligned with the Scope and Standards of Practice for Nurses as well as the ANA Code of Ethics for Nurses. In accordance with the Scope and Standards of Practice for Nurses, we met several key standards. First, we demonstrated Advocacy (Standard 8) by promptly removing the pregnant daughter from the patient's room. Given the risks associated with radiation exposure to her and her unborn child, this action was crucial to ensure their safety. We provided both the patient and her daughter with education, explaining why this decision was necessary and how it benefited them. We also exemplified Collaboration (Standard 11) by effectively working together as a team. We divided responsibilities among ourselves as nurses to provide efficient and thorough care. Additionally, we collaborated closely with the healthcare providers throughout the simulation, ensuring seamless communication and coordinated patient care. This collective effort contributed to the best possible outcomes for the patient. We also met Quality of practice (Standard 15) by adhering to established protocols for patient care. From performing routine hand hygiene to conducting thorough physical assessments and safely handling the radioactive cervical implants, we ensured that our actions were based on the latest clinical evidence, prioritizing patient safety and quality care at every step.

  In terms of ethics, we aligned our actions with several provisions in the ANA Code of Ethics for Nurses. We demonstrated Provision 1 by treating the patient and her family with the utmost respect, dignity, and compassion throughout the simulation. We listened to their concerns, provided clear explanations, and maintained a supportive environment. Additionally, we contributed to a safe healthcare environment in line with Provision 6 by swiftly removing the pregnant daughter from the room to protect her from radiation exposure. This action was vital to promoting a safe and healthy environment for all involved. Lastly, we exemplified Provision 8 by collaborating with the healthcare team and intentionally clustering patient care tasks to minimize radiation exposure. This approach not only ensured efficient care delivery but also promoted health equity by reducing potential risks and disparities in care. Our commitment to minimizing radiation exposure demonstrated our dedication to promoting the well-being of both the patient and her family. Overall, our adherence to both the Scope and Standards of Practice and the ANA Code of Ethics allowed us to provide care that was not only safe and evidence-based but also compassionate, ethical, and respectful of the patient's needs and circumstances.

B. Determine if care meets acceptable standards of practice.

- See documentation for A.

C. Apply leadership and management skills when working with other healthcare team members.

- As I've mentioned, having such a remarkable team during this simulation was an invaluable experience. We were able to seamlessly come together, divide patient care tasks, and collaborate effectively, ensuring the delivery of high-quality care. The simulation flowed smoothly

throughout, and I truly believe this was a direct result of our ability to work together efficiently. I am deeply grateful for the opportunity to collaborate with such skilled colleagues, and while I recognize that in real-world scenarios help may not always be readily available, this experience highlighted the importance of teamwork in providing exceptional patient care. This simulation provided both the opportunity and the education to understand how teamwork can elevate patient outcomes. A few examples of effective collaboration were evident during our patient assessment. While I took the patient's vitals, my colleague was already auscultating lung sounds, ensuring that no time was wasted. At the same time, while I was calling the physician for updates, my fellow nurse was documenting all actions and observations in real-time, ensuring the medical record remained up-to-date. This coordinated approach made the process feel effortless, allowing us to provide patient care more efficiently. In many ways, nursing felt more manageable and effective because of the strong, synchronized teamwork we shared.

D. Determine role as a patient advocate in a variety of patient situations
    - See documentation for A&B.